

## ABSTRACT OF THE DISCLOSURE

A biochemical analysis unit includes a substrate made of a material capable of attenuating radiation energy and/or light energy and formed with a plurality of holes, and a plurality of absorptive regions formed by forming an absorptive region in every hole. According to the thus constituted biochemical analysis unit, even in the case where the absorptive regions are formed at a high density, when a stimuable phosphor layer formed on a stimuable phosphor sheet is exposed to a radioactive labeling substance contained in the plurality of absorptive regions, electron beams ( $\beta$  rays) released from the radioactive labeling substance contained in the individual absorptive regions are reliably prevented from being scattered in the substrate and advancing to regions of the stimuable phosphor layer that should be exposed to electron beams released from absorptive regions formed in neighboring holes. Therefore, it is possible to efficiently prevent noise caused by the scattering of electron beams released from the radioactive labeling substance from being generated in biochemical analysis data produced by irradiating the stimuable phosphor layer exposed to the radioactive labeling substance with a stimulating ray and photoelectrically detecting stimulated emission released from the stimuable phosphor layer and to produce biochemical analysis data having a high quantitative accuracy.